

Prof. Trego announced the decease of the Hon. Louis M'Lane, a member of this Society, who died at Baltimore, on the 7th instant, aged 72.

Dr. R. E. Rogers made a communication on the mode of securing more certain and effectual results from the operation of electrical machines; and laid before the Society a drawing of a machine of his own invention, which he believes will operate much more effectually than the machines in ordinary use; the peculiar feature being the rapid motion given to the rubbers and the points, instead of the plate or the cylinder, as in common electrical machines.

The Society then proceeded to the stated business of the meeting, the balloting for candidates for membership.

Prof. Trego, reporter for the Proceedings of the Society, laid upon the table No. 57, published since the last meeting.

All other business having been concluded, the ballot box was opened by the presiding officer, and Capt. ANDREW A. HUMPHREYS, of the U. S. Topographical Engineers, was declared to be duly elected a member of the Society.

*Stated Meeting, November 6.*

Present, nineteen members.

Judge KANE, President, in the Chair.

Letters were read:—

From the Society of Antiquaries, dated London, July 7, 1857, and from Captain Charles Wilkes, U. S. N., both announcing donations for the library:—

From the Smithsonian Institution, dated Washington, June, 1857, returning acknowledgment for Part 1, Vol. XI. of the Transactions of the Society:—

From the Historical Society of Pennsylvania, dated Philadelphia, Oct. 12, 1857: from the Connecticut Historical Society, dated Hartford, Oct. 19, 1857: from the Corporation of Harvard College, dated Cambridge, Oct. 23, 1857: and from

the Academy of Science, of St. Louis, dated Oct. 31, 1857, severally returning thanks for No. 57, of the Proceedings of this Society.

The following donations were announced:—

FOR THE LIBRARY.

- Archæologia, or Miscellaneous Tracts relating to Antiquity: published by the Society of Antiquaries of London. Vol. XXXVI. Part 2. Vol. XXXVII. Part 1. London, 1857. 4to.
- Proceedings of the Society of Antiquaries of London. Vol. III. Nos. 43, 44, 45: Vol. VI. No. 46:—with lists of the Society, April 23, 1856,—and April 23, 1857. London. 8vo.—*From the Society.*
- Proceedings of the Royal Geographical Society of London. No. 9. Apr. May, 1857. London. 8vo.—*From the Society.*
- Tables de la Lune, construites d'après le Principe Newtonien de la Gravitation Universelle: par P. A. Hansen, Directeur de l'Observatoire Ducal de Gotha. Londres, 1857. 4to.—*From the Lords Commissioners of the British Admiralty.*
- Catalogue of the Officers and Students of Harvard University, for the Academical year 1857–8. First Term. Cambridge. 8vo.—*From the University.*
- Theory of the Zodiacal Light. By Charles Wilkes, U. S. N. Read before the Meeting of the American Association for the Advancement of Science, at Montreal, August, 1857. Philadelphia. 4to.—*From the Author.*
- Prize Essay on the Stereoscope. By William O. Lonie, A. M. F. E. J. S. &c. London, 1856. 8vo.—*From Mr. William Sharswood.*
- On the Limitation of Actions, and of Liens against Real Estate in Pennsylvania. By Eli K. Price. Philadelphia, 1857. 8vo.—*From the Author.*
- Elements of Logic: designed as a Manual of Instruction. By Henry Coppée, A. M. Prof. Eng. Lit. Univ. Pennsylvania. Philadelphia, 1858. 8vo.—*From the Author.*
- Astronomical Journal. No. 107. (Vol. V. No. 11). Oct. 24, 1857. Albany. 4to.—*From the Editor.*
- The Gospels written in the Negro Patois of English, with Arabic characters, by a Mandingo slave in Georgia: A paper read before the Ethnological Society of New York, Oct. 13, 1857; by W. B. Hodgson, Esq. of Savannah. 8vo.—*Donor unknown.*

The American Journal of Science and Arts. Second Series. Vol. XXIV. No. 72. Nov. 1857. New Haven. 8vo.—*From the Editors.*

Report of the Secretary of War, communicating in compliance with a resolution of the Senate, of Feb. 2, 1857, information respecting the purchase of Camels for the purposes of Military Transportation. Washington, 1857. 8vo.—*From Major H. C. Wayne, U. S. A.*

Major Wayne, of the U. S. Army, having been introduced to the Society, made a communication relative to the introduction of the camel into the south-western territories of the United States.

He referred to the efforts made to induce the government to attempt the introduction of the camel into our country; to the antiquity of the uses of this animal, and its peculiar adaptation to an arid and sterile region. He gave an account of the preliminary measures taken by himself and others entrusted by the government with the execution of the project; and of his visits to England and France in pursuit of information concerning the best means of carrying it into effect.

He next spoke of the habits and capacity of the camel as a useful animal, and of its great endurance under privations of food and water, often going for six or seven days without drink, and sometimes as long as ten days—remarking, at the same time, upon the easy and economical manner in which it may be subsisted.

He pointed out the errors of Buffon, in his account of the camel and dromedary, the latter name being unknown in the east. He showed that both animals are properly camels, the variety with one hump being used for riding. Its ordinary speed is about 60 miles in a day's journey of eight hours; but it may be made to perform more than this. The most useful camel of burden is a cross breed between the two varieties.

He referred to the peculiar conformation of the camel's stomach, and to the physiological examinations which demonstrate its structure. The hump of the camel is composed of a gelatinous fatty substance, which, during long abstinence, is absorbed, and appears to act as a source of sustenance. The eye is of a peculiar formation, enabling the animal to look downward and on both sides, almost without turning its head. The yielding nature of its spongy foot enables it to tread safely over rough and stony paths, where the horse would travel

with great difficulty. The flesh of the camel forms a palatable and nourishing article of food, and its milk is as good for use as that of the cow.

The camels introduced into Texas by Major Wayne have done well; only two having died of acclimatory disease since their introduction. He left Smyrna with thirty-three, of which number one died on the passage. Six young ones were born during the voyage, of which four died. The number landed was thirty-four, being one more than were on board when the vessel left Smyrna.

Major Wayne considers the climate and vegetation of Texas to be as well adapted to the camel as those of Asia, and thinks the chief inconvenience will be found in the scarcity of grain, particularly of barley, a common food of the camel in the east.

He then referred to some practical performances of the camels in Texas, showing the advantages of their employment as beasts of burden; and advanced arguments in favour of the opinion that, owing to the expense and difficulties of constructing a rail road across the continent, either by the government or by individuals, the employment of the camel must, for some time at least, be mainly relied upon as a means of transportation.

Prof. Frazer, after referring to the interesting and instructive nature of the communication just made by Major Wayne, moved that the thanks of the Society be presented to him for the remarks made by him this evening, on the introduction of the camel into the United States; which motion was unanimously agreed to.

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*Stated Meeting, November 20.*

Present, twenty-three members.

Prof. CRESSON, Vice-President, in the Chair.

A letter was read from Prof. Zantedeschi, dated Padua, Oct. 19, 1857, accompanying a communication "On the correlation of chemical forces with the refrangibility of radiations."

Also one from the Corporation of Yale College, dated New Haven, Oct. 30, 1857, acknowledging the receipt of No. 57, of the Proceedings of this Society.